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## **CLAIMS**

1. A skin dressing comprising a first hydrated hydrogel of hydrophilic polymer material containing oxidoreductase enzyme in hydrated condition, wherein the hydrogel comprises at least 25% by weight of the polymer material.

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- 2. A dressing according to claim 1, further comprising a second hydrated hydrogel of hydrophilic polymer material containing a source of substrate for the oxidoreductase enzyme, the hydrogel comprising at least 25% by weight of the polymer material.
- 3. A dressing according to claim 2, wherein the first and second hydrogels are each in the form of a respective layer, sheet or slab.
- 4. A dressing according to claim 3, wherein the first hydrogel constitutes an upper layer of the dressing and the second hydrogel constitutes a lower layer of the dressing.
- 5. A dressing according to claim 2, 3 or 4, wherein the first hydrogel comprises 15% by weight sodium poly-AMPS and 15% by weight ammonium poly-AMPS, and the second hydrogel comprises 30% by weight sodium poly-AMPS.
- 6. A dressing according to any one of claims 2 to 5, wherein the substrate is glucose.
- 7. A dressing according to claim 6, wherein glucose constitutes 5% by weight of the second hydrogel.
- 8. A dressing according to any one of claims 2 to 7, wherein the second hydrogel includes a source of iodide ions.
- 9. A dressing according to any one of claims 2 to 8, wherein the second hydrogel includes a source of zinc ions and/or a source of lactate ions.

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- 10. A dressing according to any one of claims 2 to 9, comprising a lower, skin-contacting layer comprising the second hydrated hydrogel comprising 30% by weight sodium poly-AMPS and 5% by weight glucose; and an upper layer comprising the first hydrated hydrogel comprising 15% by weight sodium poly-AMPS, 15% by weight ammonium poly-AMPS, and glucose oxidase.
- 11. A dressing according to any of the preceding claims, wherein the enzyme is glucose oxidase.
- 12. A dressing according to any one of the preceding claims, wherein the or each hydrogel comprises at least 30% by weight of the polymer material.
- 13. A dressing according to any one of the preceding claims, wherein the polymer material of the or each hydrogel comprises poly-AMPS or salts thereof.
- 14. A method of producing a skin dressing comprising a first hydrated hydrogel of hydrophilic polymer material containing oxidoreductase enzyme in hydrated condition, comprising selecting the amount of polymer material so that the dressing in use produces oxygen at the skin surface at a desired rate.
- 15. A method of treating skin, comprising applying to the skin a skin dressing comprising a first hydrated hydrogel of hydrophilic polymer material containing oxidoreductase enzyme in hydrated condition, wherein the amount of polymer material in the first hydrated hydrogel is selected so that the dressing produces oxygen at the skin surface at a desired rate.